Task card 1 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -5 & -3 \\ 7 & 4 \end{bmatrix}$.

Task card 2 Inverse Matrices & Cramer's Rule

For the system $3x + 2y = 18$ and $-x - 5y = -6$, use Cramer's rule to find x.

Task card 3 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -2 & 3 \\ -3 & 5 \end{bmatrix}$.

Task card 4 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & 7 \\ -7 & -1 \end{bmatrix}$ has no inverse.

Task card 5 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 4 & 3 \\ -7 & -5 \end{bmatrix}$.

Task card 6 Inverse Matrices & Cramer's Rule

For the system $-3x - 7y = -8$ and $-3x - 6y = -6$, use Cramer's rule to solve the system. Write (x, y).

Task card 7 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 1 & -7 \\ 1 & -8 \end{bmatrix}$.

Task card 8 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & 1 \\ -5 & -5 \end{bmatrix}$ has no inverse.

Task card 9 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 2 & 1 \\ 1 & 1 \end{bmatrix}$.

Task card 10 Inverse Matrices & Cramer's Rule

For the system -x - 6y = 11 and 3x - 4y = -11, use Cramer's rule to solve the system. Write (x, y).

Task card 11 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -2 & 1 \\ 1 & 0 \end{bmatrix}$.

Task card 12 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & 7 \\ 8 & 1 \end{bmatrix}$ has no inverse.

Task card 13 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -5 & -7 \\ -3 & -4 \end{bmatrix}$.

Task card 14 Inverse Matrices & Cramer's Rule

For the system $8x - 5y = -33$ and $8x - 4y = -28$, use Cramer's rule to solve the system. Write (x, y).

Task card 15 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 1 & 1 \\ 4 & 5 \end{bmatrix}$.

Task card 16 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & -3 \\ -6 & 2 \end{bmatrix}$ has no inverse.

Task card 17 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 1 & -2 \\ 3 & -7 \end{bmatrix}$.

Task card 18 Inverse Matrices & Cramer's Rule

For the system $-9x - 2y = 23$ and $x - y = -5$, use Cramer's rule to find x.

Task card 19 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 5 & -3 \\ -8 & 5 \end{bmatrix}$.

Task card 20 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & 6 \\ -4 & 3 \end{bmatrix}$ has no inverse.

Task card 21 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -2 & -5 \\ -3 & -8 \end{bmatrix}$.

Task card 22 Inverse Matrices & Cramer's Rule

For the system $-7x + 3y = 3$ and $-3x - y = -1$, use Cramer's rule to find y.

Task card 23 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 7 & 6 \\ -6 & -5 \end{bmatrix}$.

Task card 24 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & -9 \\ 4 & -1 \end{bmatrix}$ has no inverse.

Inverse Matrices & Cramer's Rule Task Cards

Recording sheet · Grade 12 · Solve each problem. For a matrix answer, write one number in each box. Write solutions of systems as (x, y).

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Inverse Matrices & Cramer's Rule Task Cards: Answer Key

Grade 12 · Medium

The answers online

1. $\begin{bmatrix} 4 & 3 \\ -7 & -5 \end{bmatrix}$

2. x = 6

3. $\begin{bmatrix} -5 & 3 \\ -3 & 2 \end{bmatrix}$

4. k = 49

5. $\begin{bmatrix} -5 & -3 \\ 7 & 4 \end{bmatrix}$

6. (-2, 2)

7. $\begin{bmatrix} 8 & -7 \\ 1 & -1 \end{bmatrix}$

8. k = 1

9. $\begin{bmatrix} 1 & -1 \\ -1 & 2 \end{bmatrix}$

10. (-5, -1)

11. $\begin{bmatrix} 0 & 1 \\ 1 & 2 \end{bmatrix}$

12. k = 56

13. $\begin{bmatrix} 4 & -7 \\ -3 & 5 \end{bmatrix}$

14. (-1, 5)

15. $\begin{bmatrix} 5 & -1 \\ -4 & 1 \end{bmatrix}$

16. k = 9

17. $\begin{bmatrix} 7 & -2 \\ 3 & -1 \end{bmatrix}$

18. x = -3

19. $\begin{bmatrix} 5 & 3 \\ 8 & 5 \end{bmatrix}$

20. k = -8

21. $\begin{bmatrix} -8 & 5 \\ 3 & -2 \end{bmatrix}$

22. y = 1

23. $\begin{bmatrix} -5 & -6 \\ 6 & 7 \end{bmatrix}$

24. k = 36